Claims

[c1]   A CAD system utilizing a network and comprises: a server

computer that is connected to a network and at least one client

computer that performs data transmission with said server

computer via said network; and sends basic data for CAD

graphic data from said server computer to said client computer

according to a request from said client computer; wherein said

server computer comprises: a storage means that stores basic

data for said graphic data; and a program data transmitting

section that reads said basic data for graphic data from said

storage means according to a request from said client computer,

and sends that data to said client computer; said client computer

comprises: a program data receiving section that receives said

basic data for graphic data; a computing section that creates

graphic data based on said basic data for graphic data; and a

CAD graphic data producing section that creates display data for

the graphic display unit in said client computer based on the

graphic data created by said computing section; said basic data

for graphic data comprises a plurality of variable programs for

drawing different graphics and real-number data that is

substituted into the variables of said variable programs; said

storage means of said server computer comprises a variable

program storage section that stores said plurality of variable

programs, and a real-number data storage section that stores a

plurality of kinds of said real-number data;said program data transmitting section reads a specified variable program from said variable program storage section, and reads specified real-number data from said real-number data storage section according to a request from said client computer, then sends that data to said client computer; and said computing section of said client computer substitutes said specified real-number data into the variables of said specified variable program, then executes that program and creates graphic data.

[c2]   A CAD system utilizing a network and comprises: a server computer that is connected to a network and at least one client computer that performs data transmission with said server computer via said network; and sends basic data for CAD graphic data from said server computer to said client computer according to a request from said client computer; wherein said server computer comprises: a storage means that stores basic data for said graphic data; and a program data transmitting section that reads said basic data for graphic data from said storage means according to a request from said client computer, and sends that data to said client computer; said client computer comprises: a program data receiving section that receives said basic data for graphic data; a computing section that creates graphic data based on said basic data for graphic data; and a CAD graphic data producing section that creates display data for

the graphic display unit in said client computer based on the graphic data created by said computing section; said basic data for graphic data comprises a plurality of variable programs for drawing different graphics and real-number data that is substituted into the variables of said variable programs; said storage means of said server computer comprises a variable program storage section that stores said plurality of variable programs, and a real-number data storage section that stores a plurality of kinds of said real-number data; said program data transmitting section reads a specified variable program from said variable program storage section, and reads specified real-number data from said real-number data storage section according to a request from said client computer, then sends that data to said client computer; said variable program is created using an interpreter-type programming language; and said computing section of said client computer comprises an interpreting function for interpreting said interpreter-type programming language, and substitutes said specified real-number data into the variables of said specified variable program, then executes that variable program while interpreting it by the interpreting function for interpreting interpreter-type programming language, and creates graphic data.

[c3]   The CAD system utilizing a network according to claims 1 or 2 wherein said client computer comprises a graphic name list

display control section for displaying a list of received graphic

names of the basic data for graphic data provided from said

server computer on the display unit; and a selected graphic

name transmitting section that sends the names of graphics

selected from said list of graphic names to said server computer;

said program data transmitting section in said server computer

reads said specified variable program and specified real-number

data based on the graphic names that were sent from said

selected graphic name transmitting section.

[c4]   The CAD system utilizing a network according to claims 1 or 2

wherein said server computer comprises a parts data list storage

section that groups and stores part code numbers for each part

and said real-number data corresponding to the code numbers;

said program data transmitting section transmits the part data list

containing the code numbers and the real-number data to said

client computer according to a request of said client computer;

said client computer comprises: a code number list display

control section that creates a parts code number list from said

sent parts data list transmitted, and displays the list on said

graphics display unit; and said computing section substitutes

real-number data for the parts that correspond to the names of

the part code numbers selected from said displayed parts code

number list into the variables of the variable program that

corresponds to the names of said graphics and creates graphic

data.

[c5]   The CAD system utilizing according to claim 4 wherein when part or all of the real-number data corresponding to the part code numbers selected from said part code number list in said client computer is input data that was input by the user, said computing section of said client computer substitutes said real-number data that was read from said parts data list storage section and said input data into the variables in said corresponding variable program and creates graphic data.

[c6]   The CAD system utilizing a network according to claims 1 or 2 wherein said client computer comprises a data format name selection function that is capable of selecting a data format name for the CAD software; and said CAD graphic data producing section converts the format of the graphic data created by said computing section, creates CAD graphic data having said selected data format, assigns a file name and stores the data in the memory unit.

[c7]   The CAD system utilizing a network according to claims 1 or 2 wherein said client computer comprises an interface name selection function that is capable of selecting a name for the data-exchange interface provided by the CAD software; and said CAD graphic data producing section converts the format of the graphic data created by said computing section to create CAD graphic data, and registers said CAD graphic data directly in said

CAD software by way of said data-exchange interface.

[c8]   The CAD system utilizing network according to claims 1 or 2 comprising a parts database management program for managing parts data in said program data transmitting section of said server computer.